

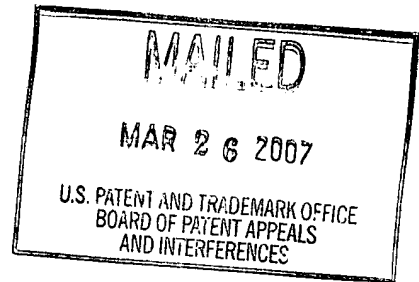
The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte JACK L. ARBISER

Appeal 2007-0091
Application 09/765,491
Technology Center 1600



HEARD February 6, 2007

Before SCHEINER, GRIMES, and LINCK, *Administrative Patent Judges*.

GRIMES, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a method of treating skin disorders using angiogenesis inhibitors. The Examiner has rejected the claims as indefinite, anticipated, and obvious. We have jurisdiction under 35 U.S.C. § 6(b). We reverse the rejection for indefiniteness, affirm the rejection for anticipation, affirm-in-part the rejections for obviousness, and enter two new grounds of rejection.

BACKGROUND

The specification describes “[m]ethods for treating diseases or disorders of the skin which are characterized by angiogenesis . . . using curcumin.” (Specification 3.) “Curcumin . . . and certain of its analogs, together termed curcuminoids, are well known natural products. . . . Curcumin is a yellow pigment found in the rhizome of *Curcuma longa*, the source of the spice turmeric.” (*Id.* at 8.)

The specification states that “curcumin inhibits basic fibroblast growth factor (bFGF)-induced proliferation . . . *in vitro* and angiogenesis *in vivo*.” (*Id.* at 15.) “Based on the results . . . with curcumin, it has been determined that other angiogenesis inhibitors can also be used to treat these skin disorders.” (*Id.* at 3.)

DISCUSSION

1. CLAIMS

Claims 4-6, 10-12, and 17-19 are pending and on appeal. The claims have not been argued separately so the claims subject to each rejection will stand or fall together. 37 CFR § 41.37(c)(1)(vii). Claims 4, 10, and 17 are the only independent claims and read as follows:

4. A method for inhibiting symptoms associated with angiogenesis in the treatment of skin disorders selected from the group consisting of lymphangiogenesis, Sturge-Weber syndrome, verruca vulgaris, tuberous sclerosis, venous ulcers, molluscum contagious, seborrheic keratosis, and actinic keratosis comprising administering to the individual in need of treatment thereof an angiogenesis inhibitor wherein the angiogenesis inhibitor is selected from the group consisting of collagenase inhibitors, angiogenic fumagillin derivatives, 2,5-diaryltetrahydrofurans, aminophenylphosphonic acid compounds, 3-substituted oxindole derivatives, thalidomides, penicillamine and IL12 in an amount effective to inhibit angiogenesis.

10. A method to treat the symptoms associated with elevated basic fibroblast growth factor in a disorder selected from the group consisting of angiosarcoma, hemangioendothelioma, basal cell carcinoma, squamous cell carcinoma, malignant melanoma, Kaposi's sarcoma, psoriasis, and recessive dystrophic epidermolysis bullosa, comprising administering to the individual in need of treatment an effective amount of a pharmaceutical composition comprising a curcuminoid in combination with a pharmaceutically acceptable carrier to inhibit angiogenesis, wherein the carrier is an ointment for topical administration containing between one-half percent (0.5%) and five percent (5%) of the curcuminoid or a polymer formulation for implantation.

17. A method for inhibiting skin disorders selected from the group consisting of lymphangiogenesis, Sturge-Weber syndrome, verruca vulgaris, tuberous sclerosis, venous ulcers, rosacea, eczema, molluscum contagious, seborrheic keratosis, and actinic keratosis comprising administering to the individual in need of treatment thereof an angiogenesis inhibitor in an amount effective to inhibit angiogenesis, wherein the angiogenesis inhibitor is selected from the group consisting of
tetracyclines inhibiting collagenase, and
a sulfated polysaccharide which inhibits angiogenesis.

Claim 4 is directed to a method for "inhibiting symptoms associated with angiogenesis" in treating any of several disorders by administering an angiogenesis inhibitor belonging to one of several classes of compounds. The claim recites that the angiogenesis inhibitor is administered to an "individual in need of treatment"; we therefore interpret the claim to require treatment of an individual suffering from one of the recited disorders. The claim also states that the angiogenesis inhibitor is administered "in an amount effective to inhibit angiogenesis."

Claim 10 is directed to a method of treating any of several skin disorders (different from the disorders recited in claim 4) by administering either an ointment containing 0.5% to 5% of a curcuminoid or a

curcuminoid-containing polymer formulation for implantation. The claim again requires administration to an “individual in need of treatment,” requiring treatment of an individual suffering from one of the recited disorders, and states that “an effective amount . . . to inhibit angiogenesis” is administered.

Claim 17 is similar to claim 4 but includes a broader list of disorders and a narrower list of compounds: the disorders include all those in claim 4 along with rosacea and eczema, but the compounds are limited to collagenase-inhibiting tetracyclines and angiogenesis-inhibiting sulfated polysaccharides.

2. INDEFINITENESS

Claims 4-6 and 17 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The Examiner argues that

[t]he term “amount effective” in claims 4 and 17 is indefinite since it is not clear what are the “effective amount[s]” to be employed in the active agents (collagenase inhibitors, angiogenic fumagillin derivatives, . . .) in order to inhibit angiogenesis without clear guidelines of effective amounts of the agents being utilized.

(Answer 5.)

Appellant argues that “effective amount” is “a common and generally acceptable term for pharmaceutical claims. . . . An effective amount of the angiogenesis inhibitor is an amount as required to alleviate the symptoms of the particular disorder being treated.” (Br. 9, citing page 14, lines 28-29 of the Specification.)

We will reverse this rejection. “A claim is indefinite if, when read in light of the specification, it does not reasonably apprise those skilled in the

art of the scope of the invention.” *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1342, 65 USPQ2d 1385, 1406 (Fed. Cir. 2003).

Here, claims 4 and 17 recite “an amount effective to inhibit angiogenesis.” The specification defines angiogenesis as a process “through which many tumors derive a blood supply by the generation of microvessels” (p. 1, ll. 24-25). “Angiogenesis results primarily from the development of new or lengthened capillaries, and larger microvessels.” (*Id.* at 2, ll. 9-10.) The specification describes *in vitro* and *in vivo* tests of antiangiogenic effectiveness. See p. 4, ll. 20-23; pp. 15-17.

We agree with Appellant that a person of ordinary skill in the art, reading the claims in light of the specification, would understand the claims to require administration of one of the recited compounds in an amount effective to inhibit the development of new or lengthened blood vessels in the individual being treated. The absence of specific dosages of specific compounds in the claims or specification would not prevent those skilled in the art from understanding the scope of the claimed methods. The rejection for indefiniteness is reversed.

3. ANTICIPATION

Claim 17 stands rejected under 35 U.S.C. § 102(e) as anticipated by Wirostko.¹ The Examiner cites Wirostko as teaching that “tetracyclines are known to have ‘collagenase inhibition properties[’] and [are] used chronically as therapy for diverse diseases including acne rosacea (column 2, lines 13-30).” (Answer 5.)

¹ Wirostko, U.S. Patent 6,218,368, issued April 17, 2001.

Appellant argues that acne rosacea refers to “acne characterized by redness,” not rosacea. (Br. 11.) In support of this argument, Appellant cites a printout from the website of the National Rosacea Society, which states (final page) that “rosacea has sometimes been referred to as ‘adult acne.’” (*Id.*)

We will affirm this rejection. Wirostko teaches that tetracyclines have been “used chronically as therapy for diverse diseases including acne rosacea (Brown SI et al, Diagnosis and treatment of ocular rosacea, *Ophthalmology*. 1978; 85:779-786) which is commonly seen in the elderly.” Col. 2, ll. 27-31. The Examiner cites McDaniel² as evidence that “acne rosacea” is another name for rosacea. McDaniel states that “[r]osacea, originally termed acne rosacea, is a chronic inflammatory skin condition affecting the face and eyelids of certain middle-aged adults.” Col. 1, ll. 12-14.

Appellant’s evidence states only that rosacea has been referred to as “adult acne,” not that “acne rosacea” refers to acne. The evidence of record therefore supports the Examiner’s position that Wirostko shows that tetracyclines were known in the art for treatment of rosacea.

Appellant also argues that Wirostko discloses use of tetracycline to treat macular degeneration of the retina, which would involve different dosages and formulations than those used to treat skin; therefore, “[t]he disclosure of Wirostko does not enable a skilled artisan to use tetracycline as an angiogenesis inhibitor for the treatment of acne rosacea.” (Reply Br. 5.)

This argument is also unpersuasive. “In patent prosecution, the examiner is entitled to reject application claims as anticipated by a prior art

² McDaniel, U.S. Patent 5,952,372, issued Sept. 14, 1999.

patent without conducting an inquiry into whether or not that patent is enabled. . . . The applicant, however, can then overcome that rejection by proving that the relevant disclosures of the prior art patent are not enabled.” *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1355, 65 USPQ2d 1385, 1416 (Fed. Cir. 2003). Thus, “a presumption arises that both the claimed and unclaimed disclosures in a prior art patent are enabled.” *Id.*

Wirostko’s disclosure is presumed to be enabling. Appellant has provided no evidence to show that undue experimentation would have been required to do what Wirostko teaches had already been done: treat rosacea with collagenase-inhibiting tetracyclines. The rejection of claim 17 under 35 U.S.C. § 102(e) is affirmed.

4. OBVIOUSNESS: CLAIMS 4-6

Claims 4 and 5 stand rejected under 35 U.S.C. § 103 as obvious over Deutch³ combined with either Brem⁴ or Andrulis.⁵ Similarly, claims 4-6 stand rejected under 35 U.S.C. § 103 as obvious over Deutch combined with Teicher.⁶ The Examiner relies on Deutch for its definition of “angiogenesis” as including formation of lymph vessels (lymphangiogenesis), and cites Brem, Andrulis, and Teicher as teaching that minocycline, thalidomide, and TNP-470, respectively, were known angiogenesis inhibitors. (Answer, pages 6-8.) The Examiner concludes that the combined references would have led those skilled in the art to employ minocycline, thalidomide, and TNP-470 for the treatment of lymphangiogenesis. (*Id.*)

³ Deutch et al., U.S. Patent 5,190,918, issued March 2, 1993.

⁴ Brem et al., U.S. Patent 6,482,810, issued Nov. 19, 2002.

⁵ Andrulis, Jr. et al., U.S. Patent 5,654,312, issued August 5, 1997.

⁶ Teicher et al., U.S. Patent 5,776,898, issued July 7, 1998.

Appellant argues that, notwithstanding Deutch's definition of angiogenesis as including formation of lymph vessels, angiogenesis and lymphangiogenesis are different processes. Appellant cites Jussila⁷ and argues that it "establishes the important differences between angiogenesis and lymphangiogenesis. . . . [T]hey are not the same, and a reference to one would not lead one to assume the same with respect to the other, and certainly not that a drug effective in one condition would be effective in the other condition." (Br. 14-15)

We agree with Appellant that the evidence of record does not support the Examiner's position that those skilled in the art would expect inhibitors of angiogenesis to also inhibit lymphangiogenesis. Jussila states that "[b]lood and lymphatic vessels develop in a parallel, but independent manner." Abstract. Jussila also states that pathological angiogenesis and pathological lymphangiogenesis are involved in different disorders. "One of the most extensively studied forms of pathological angiogenesis is "tumor angiogenesis. . . . Angiogenesis also takes place in other pathological conditions such as proliferative retinopathy, rheumatoid arthritis, psoriasis, and juvenile hemangioma." Page 676. By contrast,

[a]bnormal function of the lymphatic vessels is implicated in diseases such as lymphedema, inflammation, infectious and immune diseases, fibrosis, ascites, and tumors such as Kaposi's sarcoma and lymphangioma/lymphangiomatosis [as well as] in tumor metastasis.

Page 677.

⁷ Jussila et al., "Vascular growth factors and lymphangiogenesis," *Physiol. Rev.*, Vol. 82, pp. 673-700 (2002).

Perhaps most importantly for this case, Jussila suggests possible agents for therapeutic interventions involving blood vessel and lymphatic vessel overgrowth. See Figure 6. Suggested agents for treating pathological angiogenesis are anti-VEGF, anti-VEGFR-2, and tyrosine kinase inhibitors, while “VEGFR-3 inhibitors” are suggested for treating overgrowth of lymphatic vessels. Thus, Jussila supports Appellant’s position that those skilled in the art would not have expected all angiogenesis inhibitors to also inhibit lymphangiogenesis.

It is true that Deutch defines “angiogenesis activity” as “the ability to inhibit or enhance the formation of blood vessels or lymph vessels.” Col. 3, ll. 21-23. That definition, however, only shows how Deutch was using the phrase “angiogenesis activity” in that patent specification. It is not sufficient to show that those skilled in the art recognized “angiogenesis” as including lymph vessel formation (lymphangiogenesis) and therefore does not outweigh the evidence provided by Jussila.

In sum, the Examiner’s rejections rely on the assumption that angiogenesis inhibitors would also have been expected to inhibit lymphangiogenesis, but this assumption is not supported by the evidence of record. We therefore reverse the rejections of claims 4-6 under 35 U.S.C. § 103.

5. OBVIOUSNESS: CLAIMS 10-12 AND 18

Claims 10-12 and 18 stand rejected under 35 U.S.C. § 103 as obvious over Aggarwal.⁸ The Examiner cites Aggarwal as teaching a method for treating, among other things, basal cell carcinoma or squamous cell

⁸ Aggarwal, WO 95/18606, published July 13, 1995.

carcinoma by administering curcumin. The Examiner notes that Aggarwal teaches that the curcumin composition can be administered in ointment form and in a dosage ranging from 1 μ g to 100 mg. (Answer 8.)

We agree with the Examiner that Aggarwal would have suggested the method of claim 10 to those of ordinary skill in the art. Aggarwal teaches “a method for the treatment of pathological cell proliferative diseases comprising administration to an animal of a pharmacologically effective dose of curcumin.” Page 5, ll. 20-23. The diseases to be treated include psoriasis, basal cell carcinoma and squamous cell carcinoma, all of which are recited in claim 10. Page 5, line 34 to page 6, line 1.

Aggarwal teaches that “the curcumin and curcumin analogues are administered in a dose of from about 1 microgram to about 100 milligram.” Page 6, ll. 9-11. Finally, Aggarwal teaches that the curcumin-containing compositions can be administered topically (page 7, l. 27) in the form of an ointment (page 8, l. 10). We agree with the Examiner that these teachings would have suggested the method of instant claim 10 to a person of ordinary skill in the art.

Appellant argues that “[t]he examiner has cited no evidence why one skilled in the art would have any motivation to treat completely different disorders with the claimed formulation.” (Br. 17.) Aggarwal, however, expressly suggests treating at least three of the disorders recited in claim 10. Therefore, this argument is unpersuasive.

Appellant also argues that “the examiner has cited no evidence . . . why one would have any expectation of success based on a reference using a

hugely different amount of drug (1 microgram to 100 milligrams) as compared to the amount in the claimed formulation.” (Br. 17.)

Claim 10 is directed to a method of administering an ointment containing curcumin at a concentration of 0.5% to 5%. Aggarwal teaches a method of administering curcumin in an amount ranging from 1 microgram to 100 milligrams. Those skilled in the art would have found it obvious to formulate a curcumin-containing composition in whatever concentration would allow administration of the desired amount of curcumin in a convenient dosage volume. For example, if a convenient dosage volume was one milliliter, those skilled in the art would learn from Aggarwal that the curcumin-containing composition should have a concentration of 1 µg/ml to 100 mg/ml, which correspond to concentrations of 0.0001% to 10% weight to volume (where 1% = 1 g/ml).

Aggarwal would have suggested, to those skilled in the art, a range of concentrations that encompasses the range recited in claim 10. “[W]here there is a range disclosed in the prior art, and the claimed invention falls within that range, there is a presumption of obviousness. But the presumption will be rebutted if it can be shown: (1) That the prior art taught away from the claimed invention; or (2) that there are new and unexpected results relative to the prior art.” *Iron Grip Barbell Co., Inc. v. York Barbell Co., Inc.*, 392 F.3d 1317, 1322, 73 USPQ2d 1225, 1228 (Fed. Cir. 2004) (citations omitted).

Here, Appellant has not shown that the prior art taught away from the claimed range or that the claimed range produces unexpected results. Therefore, he has not overcome the presumption of obviousness. We affirm

the rejection of claim 10 as obvious in view of Aggarwal. Claims 11, 12, and 18 fall with claim 10.

6. OBVIOUSNESS: CLAIMS 10-12 AND 19

Claims 10-12 and 19 stand rejected under 35 U.S.C. § 103 as obvious over Arbiser,⁹ Thaloor,¹⁰ and Aggarwal. As noted above, claims 10-12 and 19 were not argued separately and therefore stand or fall together. Since we have already determined that claim 10 would have been obvious in view of Aggarwal alone, we agree with the Examiner that claim 10 would have been obvious in view of Arbiser, Thaloor, and Aggarwal.

Appellant argues that “[t]here is no disclosure or suggestion in Arbiser 1998 of the formulation used in claim 10. Neither Thaloor nor Agg[ar]wal make up this deficiency.” (Reply Br. 10.)

This argument is unpersuasive because, for the reasons discussed above, Aggarwal would have suggested the formulation recited in claim 10.

⁹ In the Answer, Arbiser is cited as follows: “Arbiser et al. ‘The antiangiogenic agents TNP-470 and 2-methoxyestradiol inhibit the growth of angiosarcoma in mice’. J. Am. Acad. Dermatol., 1999, June; 40 (6t 1):925-9.” As Appellant recognized, “it appears that the Examiner is discussing the subject matter of Arbiser, et al., *Molecular Medicine*, 4(3):191-195 (1998) (‘Arbiser 1998’).” (Reply Br. 10.) We agree with Appellant that the Examiner’s rejection relies on Arbiser 1998, not the Arbiser 1999 reference cited in the Answer. Arbiser 1998 was cited in the Form PTO-892 that accompanied the Office action mailed Nov. 4, 2003. Since Appellant appreciated the correct basis of the rejection and responded to it in the Reply Brief, we see no need to remand the application for the Examiner to clarify the record.

¹⁰ Thaloor et al., “Inhibition of angiogenic differentiation of human umbilical vein endothelial cells by curcumin,” *Cell Growth & Differentiation*, Vol. 9, pp. 305-312 (1998).

We affirm the rejection of claim 10 as obvious in view of Arbiser, Thaloor, and Aggarwal. Claims 11, 12, and 19 fall with claim 10.

NEW GROUNDS OF REJECTION

Under the provisions of 37 CFR § 41.50(b), we enter the following new grounds of rejection:

- Claims 4 and 5 are rejected under 35 U.S.C. § 102(b) as anticipated by Andrulis; and
- Claims 4-6 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

1. ANTICIPATION

Claims 4 and 5 are rejected under 35 U.S.C. § 102(b) as anticipated by Andrulis. Claim 4 is reproduced above. Claim 5 depends on claim 4 and requires the angiogenesis inhibitor to be applied topically.

Andrulis teaches a method of treating “inflammatory and autoimmune dermatoses which comprises topical and/or systemic administration of . . . thalidomide.” Abstract. Thalidomide is one of the angiogenesis inhibitors listed in claim 4. Among other conditions, Andrulis discloses treating “molluscum contagiosum.” Col. 7, ll. 3-4. This condition reasonably appears to be the same as the “molluscum contagious” recited in claim 4. Andrulis teaches a method of treating molluscum contagiosum by topical administration of thalidomide, and therefore anticipates claims 4 and 5.

2. INDEFINITENESS

Claims 4-6 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claim 4, and therefore also claims 5 and 6, are directed to a “method for inhibiting symptoms associated with angiogenesis in the

treatment of skin disorders selected from” a group that includes “lymphangiogenesis.”

Based on the evidence of record, however, lymphangiogenesis does not appear to be a skin disorder, or a disorder of any kind for that matter. Jussila describes lymphangiogenesis as a normal process by which new lymphatic vessels are formed (page 677). Jussila states that “[a]bnormal function of the lymphatic vessels is implicated” in certain diseases but does not describe lymphangiogenesis itself as a disorder in need of treatment (*id.*). Likewise, in Figure 6, Jussila suggests “VEGFR-3 inhibitors” for treating “lymphangioma” and “lymphangiosarcoma,” but not for treating lymphangiogenesis itself.

Claims 4-6 are directed to a method of treating symptoms of various disorders by administering certain compounds to an “individual in need of treatment thereof.” Since lymphangiogenesis does not appear to be a skin disorder, or any other kind of disorder in need of treatment, it is unclear what individuals are in need of treatment for lymphangiogenesis. The claims are indefinite because it is unclear what patient populations are encompassed by the claimed therapeutic method.

Appellant has argued that “[l]ymphangiogenesis has been implicated in a number of skin disorders, including Kaposi’s sarcoma . . . , lymphangiomas . . . , neoplasm metastasis, edema, rheumatoid arthritis, and psoriasis.”¹¹

¹¹ This argument was made in a paper styled “Submission in Response to Questions Newly Raised During Oral Argument,” which was filed after the oral hearing in this appeal. The paper has been entered into the

This argument does not clarify the scope of the claims. Appellant has pointed to several disorders that are associated with lymphangiogenesis but that is not the issue. Claims 4-6 are directed to a method of administering an angiogenesis inhibitor to an individual in need of treatment of lymphangiogenesis. The claims are not limited to methods of treating individuals having one of the disorders listed in Appellant's argument but encompass treating an individual suffering from the "skin disorder" lymphangiogenesis. Based on the evidence of record, however, it would appear that lymphangiogenesis is a normal process and therefore one that takes place in all individuals.

Those of skill in the art would not understand the meaning of the term "individual in need of treatment" of lymphangiogenesis. The scope of claims 4-6 is therefore unclear. Claims 4-6 are rejected under 35 U.S.C. § 112, second paragraph.

SUMMARY

We reverse the rejection for indefiniteness and the rejections of claims 4-6 over the prior art. We affirm the rejections of claim 17 as anticipated

administrative file but we have considered it only to the extent that it is relevant to the new grounds of rejection. Normally, if additional briefing is not requested by the panel at oral argument, any post-hearing submissions are improper. *See Ex parte Cillario*, 14 USPQ2d 1079, 1079-80 (Bd. Pat. App. Int. 1989) ("Once the oral hearing provided for by 37 CFR 1.194 [now 37 CFR 41.73] is held, ordinarily the *only* order of business left is the board's decision. . . . Nor is it appropriate to attempt, in such a [post-hearing] paper, to present answers to questions presented by the panel, the answers to which were not forthcoming at the hearing or were not fully answered to appellant's satisfaction.").

and claims 10-12, 18, and 19 as obvious over the prior art. We enter new grounds of rejection for anticipation and indefiniteness.

Time Period for Response

Regarding the affirmed rejection(s), 37 CFR § 41.52(a)(1) provides that “Appellant may file a single request for rehearing within two months from the date of the original decision of the Board.”

In addition to affirming the examiner's rejection(s) of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides: “A new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 CFR § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

Should the appellant elect to prosecute further before the examiner pursuant to 37 CFR § 41.50(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the

prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

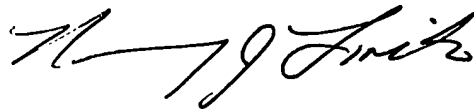
AFFIRMED-IN-PART, 37 CFR § 41.50(b)



TONI R. SCHEINER)
Administrative Patent Judge)



ERIC GRIMES)
Administrative Patent Judge)



NANCY J. LINCK)
Administrative Patent Judge)

) BOARD OF PATENT
) APPEALS AND
) INTERFERENCES

EG

Appeal No. 2007-0091
Application No. 09/765,491

PATREA L. PABST
PABST PATENT GROUP LLP
400 COLONY SQUARE, SUITE 1200
1201 PEACHTREE STREET
ATLANTA GA 30361